

EXHIBIT 1

Exhibit I

7,072,190 Claim Chart for Cisco's End Products Incorporating One or More of Certain New CPNs

Claim	7,072,190	
1.	A power converter system comprising:	<p>Cisco manufactures, uses, sells, offers to sell, and imports into the U.S. products that incorporate one or more unregulated bus converters and point-of-load converters ("POLs")¹ in an intermediate bus architecture system that is a power converter system.</p> <p>Cisco's accused products² include (1) all Cisco systems from the product families identified in Table 1 that incorporate one of the new CPNs identified in Table 2 and/or the manufacturers' part numbers identified in Table 4 and POLs used in Intermediate Bus Architecture, and (2) all Cisco systems from the product families identified in Table 5 that incorporate one of the new CPNs identified in Table 6 and/or the manufacturers' part numbers identified in Table 8 and POLs used in Intermediate Bus Architecture (hereinafter altogether, in this claim and those that depend from it, "Cisco's end products"), including the non-limiting list of PIDs identified in Tables 3 and 7 in the cover document to these contentions.</p> <p>Throughout this chart, the elements of the asserted claims are identified with respect to a non-limiting example of Cisco's end products that infringe the claims as discussed below.</p> <p>The Cisco end product numbers identified in the cover document to these contentions are, per Cisco's representations, matched with a new Cisco part number for the bus converter used in the product in CISCO01764345, except where Cisco has failed to yet provide the new CPN. See Cisco's Sixth Amended Response to Interrogatory No. 1. CISCO01764345 indicates in Column F ("Schem & BOM Pull") whether the PID's technical specifications have been produced in this case. <i>Id.</i> CISCO01783277 identifies what Cisco represents are the manufacturer part numbers qualified for each new CPN.</p> <p>For example, according to Cisco's discovery responses, accused PID DS-X9224-96K9 is part of the</p>

¹ POLs devices, as that term is used currently, are non-isolating regulation stages and may take the form of POL modules, PowerBlocks, and discrete designs.

² The products included in these Second Supplemental infringement contentions are in addition to those accused in SynQor's original and First Supplemental infringement contentions.

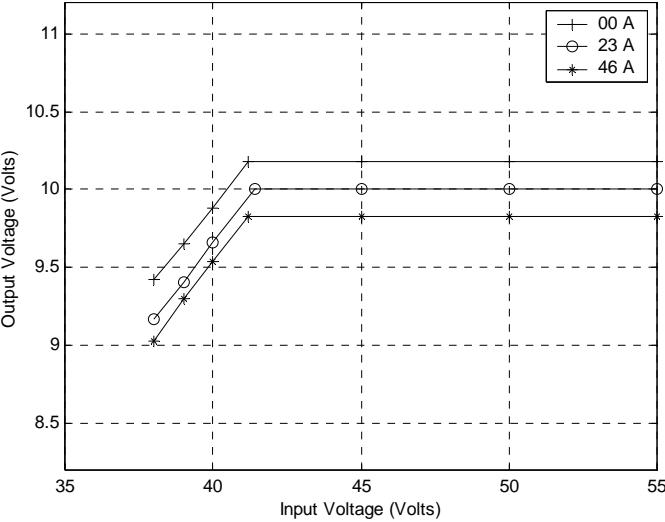
	<p>MDS9000 product family and currently uses new CPN 341-0446-01. <i>See CISCO01764345</i>. Cisco has produced a bill of materials ("BOM") and schematic that it represents are for this PID. <i>Id.</i> The BOM at CISCO01761372 indicates at Cell 3A that it is for the same item number (68-3303-04) as the TAN identified in Col. F of CISCO01764345. The BOM at CISCO01761372 additionally maps this PID to a schematic with drawing no. 92-8692-02 (Row 5,273) and another schematic with drawing no. 92-8261-02 (Row 1,169). Drawing no. 92-8692-XX was produced by Cisco at CISCO01761392-531, and drawing no. 92-8261-02 was produced by Cisco at CISCO01761373-391. Cisco has indicated that the manufacturers' part numbers qualified for new CPN 341-0446-01 include: the Bel Fuse 0RRQ-50V10LG, the Murata Power Solutions RBQ-9.6/50-L48NBL2, and the Power-One QTR52T50096. <i>See CISCO01783277</i>. The BOM for the DS-X9224-96K9 CISCO01761372 indicates that the new CPN 341-0446-01 is referenced as U35 in the schematic. <i>See CISCO01761372</i> at Row 5,114. SynQor's infringement contentions for this claim are discussed below using the DS-X9224-96K9 and Power-One QTR52T50096 bus converter as exemplary of how the accused products infringe the asserted claims.</p>
a DC power source;	<p>Cisco's end products include a DC power source. For example, the schematic for the DS-X9224-96K9 shows a bus labeled P42V_HV_POS and P42V_NEG that is a DC power source applied to the input pins labeled VIN+ and VIN- of the bus converter labeled U35, Q48SB 9R650NNFA, 1/4 Brick, 360W. <i>See CISCO01761518</i>. The front-end for the MDS9000 is also a DC power source. <i>See, e.g.</i>, Cisco MDS 9500 Series Hardware Installation Guide, Appendix C "Technical Specifications."</p> <p>The Power-One QTR52T50096 bus converter used in the DS-X9224-96K9 is also labeled as a DC-DC Converter in its datasheet and indicates a DC power source is accepted as its input. <i>See CISCO01765456-65</i>.</p>
a non-regulating isolation stage comprising:	<p>At least the new CPN bus converters identified in Tables 2 and 6 used in Cisco's end products are non-regulating isolating bus converters, which are used as a non-regulating isolation stage of a power converter system of the claimed inventions. See page 1 of the corresponding data sheets, including, for example page 1 of the Power-One QTR52T50096 data sheet noting that the bus converter is "isolated." CISCO01765456-65. Though Cisco and many of the datasheets for the new CPNs assert that these new CPNs are regulated or fully regulated, the new CPNs in fact are non-regulating, including to the extent that they are unregulated or non-regulating isolation stages at least at certain input voltages within the operational range of the accused Cisco end products and including to the extent their output voltages droop materially with increasing output current. The table below indicates the range of input voltages below which the new CPNs operate unregulated or non-regulated</p>

		regardless of their material output voltage droops with increasing output:	
Mfg. Name	Mfg. Part Number	Unregulated Operation at Least Below Input Voltage:	
BEL FUSE	0RRE-32S10BG	38.2 V - 41.6 V	
BEL FUSE	0RRE-32S10LG	38.2 V - 41.6 V	
BEL FUSE	0RRM-50S10LG	38.6 V - 40.4 V	
BEL FUSE	0RRQ-32S10LG	Sample not Yet Available	
BEL FUSE	0RRQ-40S10LG	Sample not Yet Available	
BEL FUSE	0RRQ-45M11LG	42.8 V - 46.0 V	
BEL FUSE	0RRQ-50V10LG	38.0 V - 41.1 V	
DELTA	Q48SK9R637NNxx	38.1 V - 39.6 V	
MURATA POWER SOLUTIONS	RBQ-10.8/50-L54NBL2	44.6 V - 45.6 V	
MURATA POWER SOLUTIONS	RBQ-31250-CIS	35.4 V - 36.4 V	
MURATA POWER SOLUTIONS	RBQ-8.5/45-L48NBL2	35.3 V - 36.0/36.5 V	

MURATA POWER SOLUTIONS	RBQ-9.6/50-L48NBL2	39.7 V - 40.5 V
POWER-ONE	QTR52T50096	41.2 V - 41.4 V
POWER-ONE	QTR54T48108	Sample not Yet Available
POWER-ONE	SQTR48T27096	Sample not Yet Available
POWER-ONE	SQTR48T33096	Sample not Yet Available
VICOR	IBC030E01-00	Unregulated throughout entire operating range

See also Appendix B; CISCO143420. The DC bus to which the input pins of the new CPN bus converters are connected is a DC power source that is designed and configured to provide and does provide a voltage below the input voltages noted above, and the AC/DC front end or isolated DC/DC front end that connects to the DC bus is a DC power source that is designed and configured to provide and does provide a voltage below the input voltages noted above. See Appendix C.

At least the new CPNs in Tables 2 and 6 all operate as unregulated or non-regulating bus converters at least below the input voltages noted above as shown for example in the graph below of Output Voltage over Input Voltage for the Power-One QTR52T50096 regardless of their material output voltage droops with increasing output:

	 <p>Breakpoints: 41.2 V @ 0 A; 41.4 V @ 23 A; 41.2 V @ 46 A</p> <p>See also Appendix B. In addition, the material droops in their output voltages with increasing output current, as reflected in an exemplary fashion above, are also indicative of their unregulated or non-regulated nature. See also Appendix B.</p>
a primary transformer winding circuit having at least one primary winding connected to the source;	The new CPN bus converters identified in Tables 2 and 6 have a primary transformer winding circuit having at least one primary winding connected to the source. In the new CPN bus converters, the primary transformer winding circuit connects to a DC power source. For example, the primary transformer winding circuit, which connects to a DC power source, includes a primary winding of the transformer and components located within the region indicated by the ellipse marked "primary transformer winding circuit" in the exemplary annotated figure of the Power-One QTR52T50096 bus converter below: